

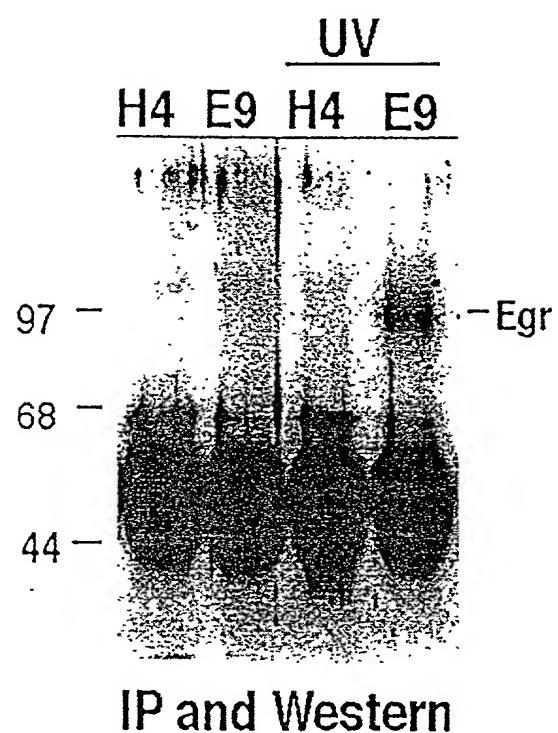
FIG. 2

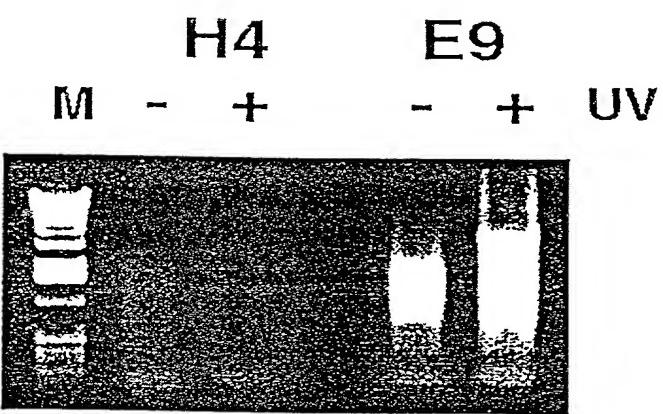
FIG. 3

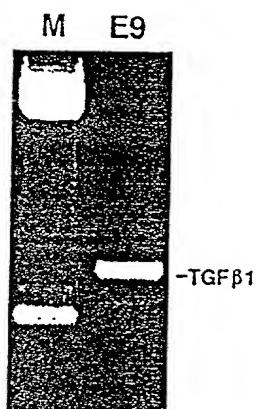
FIG. 4

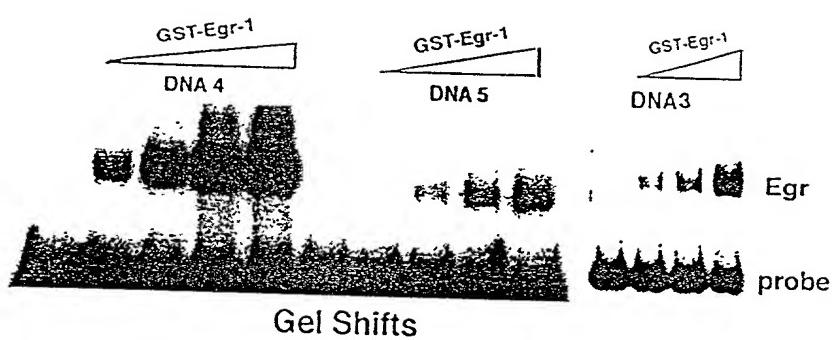
FIG. 5

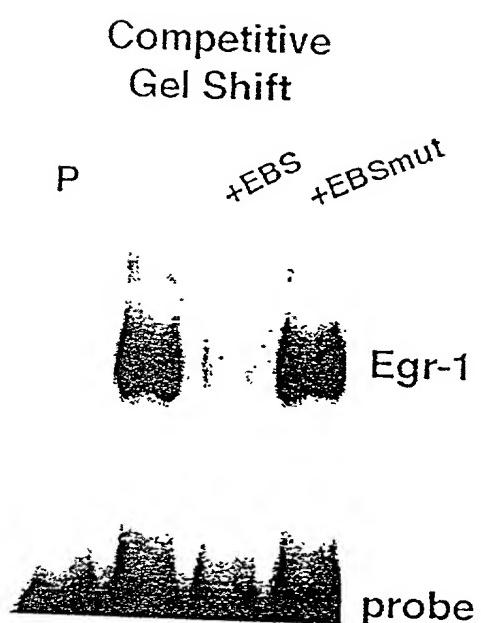
FIG. 6

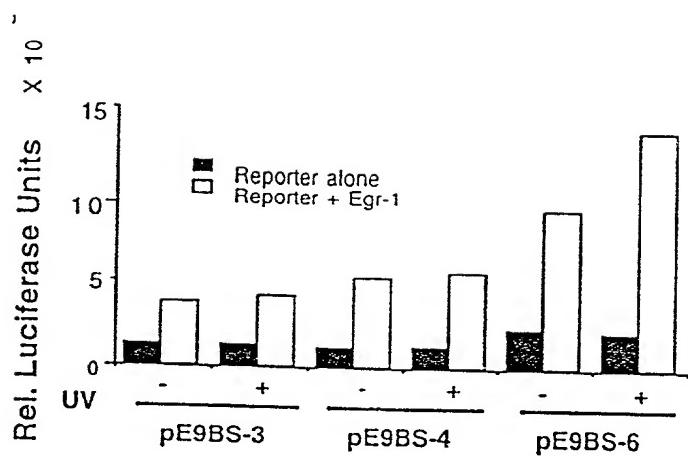
FIG. 7

FIG. 8

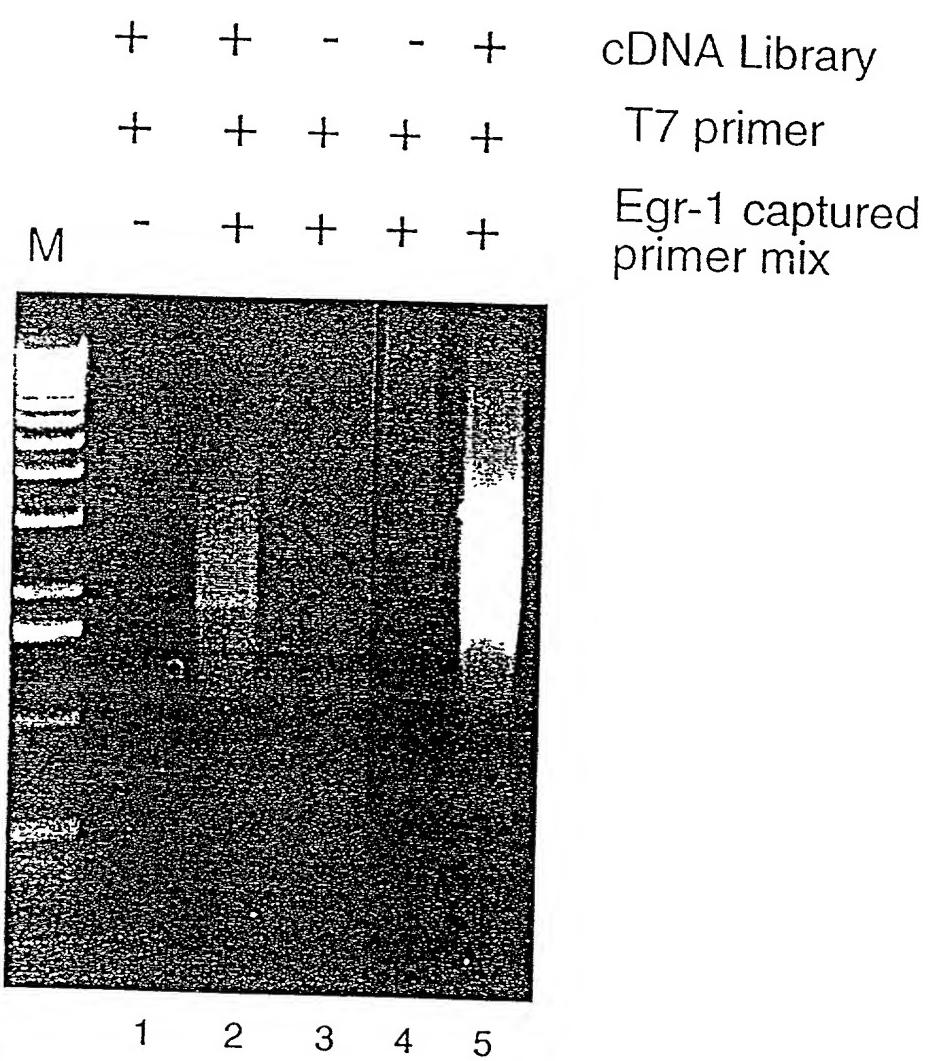


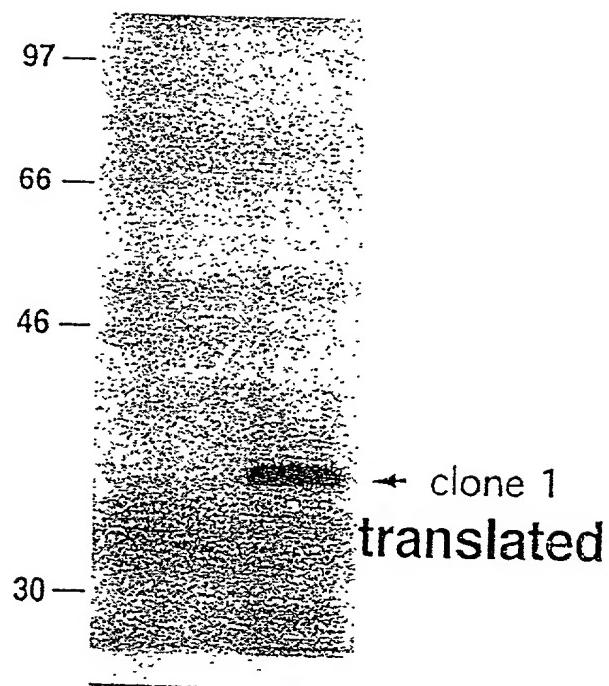
FIG. 9

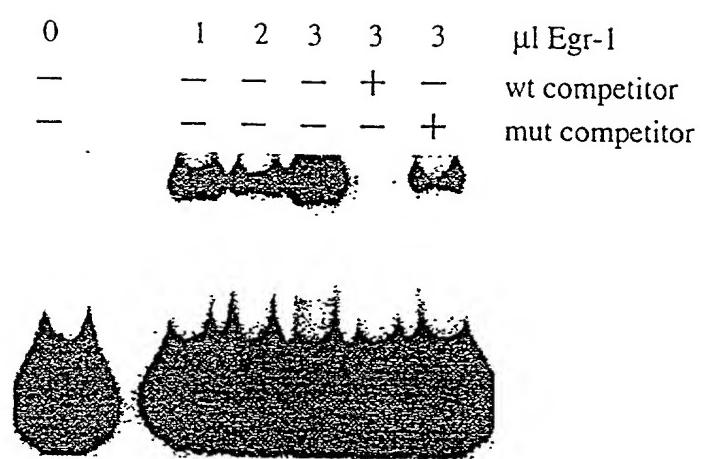
FIG. 10

FIG. 11

Clone 1 nucleotide sequence

TAATACGACTCACTATAAGGGAGACGAGCGGTGTCATGGCCGCCGACAGTGACG
ATGGCGCAGTTCACTCCCAGCTTCCGACGGTGGTGTAGCAAAAGCACA
ACATCTGGGGAGGAGCTAGTAGTCCAGGTTCCCGTAGCCATAAGACAGCTAATT
CAACTTCAAGGAGATGTGGCATCCCTCCTGCTAGCCATAAGACAGCTAATT
CGTTGGCTGTGGACACGGAGCTGAGTGGGCTGGGACAAGAAGAGTTGCT
GAACCAGTGCATTGAGGAACGTTACAAGGCCGTGTGTCATGCTGCCAGGACCC
GTTCTATCCTTCCCTGGGCCTCGCCTGCTCAAGCGGCAGCCAGACAAGGGT
GAACATTCCATCTGGCTCAAGTGTCAATCTACTCTGCTGTGATGGAGGAG
TATGTCATAGAACCAAAGTCTGTGCACTTCTGATACAGCATGGCTCAACTTC
AACCAAGCAGTATGCCAAGGCATCCCTACCATATAAGGGCAATGACAAGGG
TGATGAGGCCAGAGGCCAGTCAGTACGGACCCTATTCTGGAGCTAA
TCCGAAGGCCGCCGGCCCTGTTGCTACACAATGGCCTTATAGACTTG
GTGTTCTGTACCAAAACTCTATGCACACCTCCCTGAGAGTCTGGAG
ACCTTCACCGCTGACCTGTGAGATGTTCCAGCAGGCATTATGACAC
CAAATATGCTGCTGAGTTCATGCCGTTCTGTCAGGCTTACTAGAATATGC
CTTCCGGAAATGTGTAGGTGCTGAGGATTAGCAGTGAACAAAACAGACC
ACAAAACCTGCTTATGGAGCTTATGCTAGTGGACCATTACCCCTTGCG
CTGTTGCAGTGAACGGAAATGGGAAGCAGCGGGCAGCTGGCAGCCCACAC
CTTACCCCTGGAGTTCTGCAACTATCCTCCAGCATGAGGGACCATTGATTAC
CGCTGCTGCCCTGCCCTGAGCAACCCACCCTCATCCACCAGCATCTGTGAC
AACTTCTCGGCCATTGGCTGGTCCCCCTGGGACCACAGTGTCTCAGTCTCAC
GATATTGACCCATTGACACTGATGAGGCTGCCAGAGGACAAGCGGCG
ACGGCGACGACGTAGGGAAAAACGGAAGAGGGCTTATTGAACCTACCGGGG
ACACAGACCTCTGGGAAGCTAAGGATGGCTCCCTCCAAGAACAGCAGGTCTGTGG
GGATAGCATCAAGCCTGAAGAAACCGAGCAGGAGGTGGCTGCCATGAAACT
AGGAACCTGCCTCACTCCAAGCAAGGCAACAAAAATGACTTAGAGATGGGGAT
TAAGGCAGCAAGGCCTGAAATAGCTGATAGAGCTACCTCAGAAGTGCCAGGG
GCCAAGCCAGTCTAACCCAGTGCCTGGGGTGGATTGCACCGGGCTGGTTT
GATGCCATTATGACAGGTTATGTGATGCCATTGTGGAAGTGAGCCAGGGACC
GCAACCCCTGCAGCTGGACCCCTGGCTCCCTGAATGCCACAATAAGGTATATT
GAGTGGCAAAGCTGTACCCCTCACAGTGGCAAGAGGCCAGTCTCTCGTTCC
CCAAAGCCCACAATCAGAAGATGAAGCTCACTGGGAGTAGCTGATGCAAC
TTCCACCTGCTCTCAGGTGGAACAGAGGTATTGGGCTCTAGCCTGAAA
TGTCACTCTCAACTGCTACTGAGTTGGGGAGGGGGAAATGTCTTGACAGACA
TCACTGCAATTGCCCTGGACCCGCTCCTTATCCCAGTGTGAGGTACAAGTAA
GAAGGCTGACCAGCACCTGTAACACTGACTTTAAGTCTGAAAATGTCTT
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AAAAAAAAACTCGAGGGGGGCCGGTACCCATTCTCCCTATAGTGAGTCG
TATTA

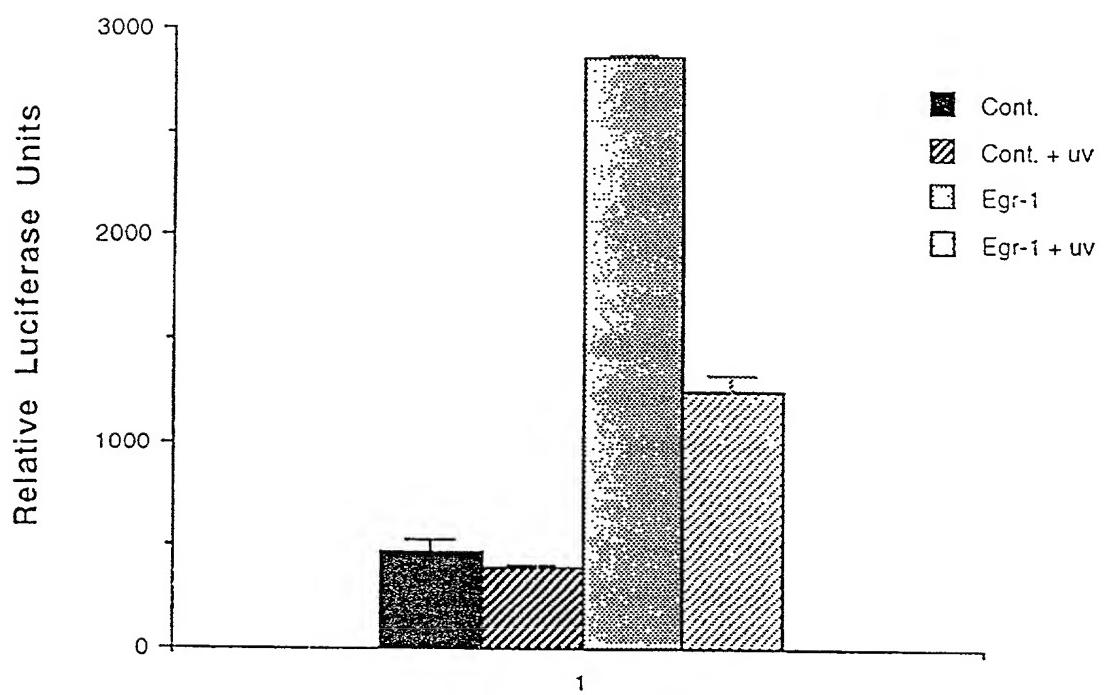
FIG. 12

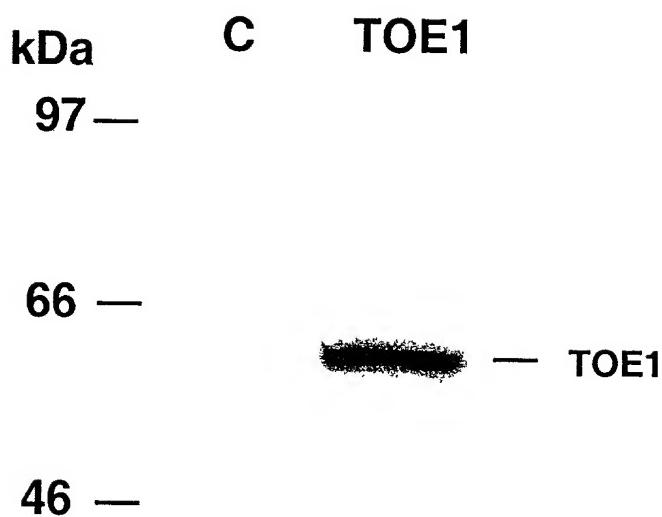
FIG. 13

FIG. 14

TOE1 Protein sequence

MAADSDDGAVSAPAASDGGVSKSTS GEELVVQVPVVDVQSNNFKEMWPSLLL
AIKTANFVAVDTELSGLGDRKSLLNQCIEERYKAVCHAARTRSILSLGLACFKRQ
PDKGEHSYLAQVFNLTLCMEEYVIEPKSVQFLIQHGFNFNQQYAQGIPYHKGN
DKGDESQSQSVRTLFLELIRARRPLVLHNGLIDL VFLYQNFYAHLPESLGTFTADL
CEMFPAIGYDTKYAAEFHARFVASYLEYAFRKCERENGKQRAAGSPHLTLEFCN
YPSSMRDHIDYRCCLPPATHRHPTSIDNFSAYGWCPLGPQCPQSHDIDLII DTD
EAAAEDKRRRRRRREKRKRALLNLPGTQTSGEAKDGPPKKQVC GDSIKPEETEQ
EVAADETRNLPHSKQGNKN DLEMGIKAARPEIADRATSEVPGSQASP NPVP GGG
LHRAGFDAFMTGYVMA YVEVSQGPQPCSSGPWLPECHNKVYLSGKA VPLTVAK
SQFSRSSKAHNQKMKTWGSS

TOE1 DNA sequence

FIG. 14 Cont.

gcactccagggggcgctggctcgggtccacccggctgcgagccgcagcacaggcaataggcaattagcgccgcagg
ctgcctccccgcgcggacccggacgtctgaacggaaagttcgcacccatcggcgcacccgacggcagacccccc
ccccgactgctgaaccgcgcaggagacggaccgcaagtccagcgtacccacagacactcaggcggagacgagcgg
gtcATGGCCGCCGACAGTGACGATGGCGCAGTTCAGCTCCGCAGCTCCGA
CGGTGGTGTCAAGAAAAGCACAACATCTGGGGAGGAGCTAGTAGTCCAGGTT
CCCGTAGTGGATGTGCAAAGCAACAATTCAAGGAGATGTGGCCATCCCTCC
TGCTAGCCATAAAGACAGCTAATTCTGGCTGTGGACACGGAGCTGAGTGG
GCTTGGGGACAGGAAGAGTTGCTGAACCAGTCATTGAGGAACGTTACAAG
GCCGTGTGTCATGCTGCCAGGACCCGTTCTATCCTTCCCTGGGCCTGCCTG
CTTCAAGCGGCAGCCAGACAAGGGTAACATTCTATCTGGCTCAAGTGTTC
AATCTCACTCTGCTGTGCATGGAGGAGTATGTCATAGAACCAAAGTCTGTG
AGTTCTGATACAGCATGGCTCAACTCAACCAGCAGTATGCCAAGGCAT
CCCCTACCATAAGGCAATGACAAGGGTATGAGAGGCCAGAGCCAGTCAGT
ACGGACCCATTCTGGAGCTAATCCGAGCCGCCGCCCCCTGGTGCTACAC
AATGGCCTATAGACTGGTGTCTGTACCAAGAACTCTATGCACACCTCCC
TGAGAGTCTGGAACCTTCACCGCTGACCTGTGAGATGTTCCAGCAGGC
ATTATGACACCAAATATGCTGCTGAGTTCATGCCGTTCTGGCCTCCTA
CTTAGAATATGCCTCCGAAATGTGAACGGAAAATGGGAAGCAGCGGGC
AGCTGGCAGCCCACACCTTACCTGGAGTTCTGCAACTATCCTCCAGCATGA
GGGACCATATTGATTACCGCTGCTGCCGCCCCAGCAACCCACCGTCCTCAT
CCCACCAAGCATTGTGACAACCTCTGGCTTATGGCTGGTGCCTGGGACC
ACAGTGTCTCAGTCACGATATTGACCTTATCATTGACACTGATGAGGCTG
CGGCAGAGGACAAGCGGCACGGCAGCACGAGTGGAAAAACGGAAGAGG
GCTTATTGAACCTACCGGGACACAGACCTCTGGGAAGCTAAGGATGGTC
CTCCCAAGAACGAGGCTGTGGGGATAGCATCAAGCCTGAAGAAACCGAGC
AGGAGGTGGCTGCCGATGAAACTAGGAACCTGCCTCACTCCAAGCAAGGCA
ACAAAAATGACTTAGAGATGGGGATTAAGGCAGCAAGGCCTGAAATAGCTG
ATAGAGCTACCTCAGAACAGTGCCAGGGAGCCAAGCCAGTCCTAACCCAGTGCC
TGGGGGTGGATTGCACCGGGCTGGTTTGATGCCTTATGACAGGTTATGTGA
TGGCCTATGTGGAAGTGAGCCAGGGACCGCAACCCCTGCAGCTCTGGACCC
GCTCCCTGAATGCCACAATAAGGTATTTGAGTGGCAAAGCTGTACCC
ACAGTGGCCAAGAGGCCAGTTCTCTGGCTTCCAAAGCCCACAATCAGAAGA
TGAAGCTCACTGGGGCAGTAGCTGA